

and were transported by human agencies to Polynesia, the East Indies, and Africa, in very remote times, or at least in times much antedating the discovery of the New World by the Spaniards.

A MISSISSIPPI ALETRIS AND SOME ASSOCIATED PLANTS

BY E. J. HILL

In 1858 I was engaged in teaching at Starkville, Mississippi. Some of the spare hours were given to the study of the plants of the locality. A physician of the place wishing to obtain the colic-root (*Aletris farinosa*), the few books on botany accessible were consulted to ascertain the kind of ground in which it was likely to be found. It was decided to try the pine-barrens west of Starkville. A drive of a few miles through a rich farming region brought us to one in great contrast with it. Crossing a small stream, named in my note-book, Trim-Cane creek, we were abruptly brought into the barrens with their dry, sandy soil and corresponding flora. Only a short time passed before I found a plant which answered the description of an *Aletris*. As there were but two species mentioned in the manuals, *A. farinosa* L. and *A. aurca* Walt., the one discovered, having white flowers, was identified with the former. The leaves at the base of the stems did not agree very well with those described, but being of little experience in the study, I was not as much disturbed by the discrepancy as would have been the case in after years. Having taken a few more plants we returned to Starkville. The time of collecting was May 22, 1858. What use the physician made of the *Aletris* I do not know. A couple of months from that time I returned to New York, not to go back to Mississippi again.

In 1863 I came to Illinois to reside. The place was just south of Chicago, and the first summer in the state revealed the real *A. farinosa* in the sands of the former bed of Lake Michigan. It had radical leaves quite different from the obovate or oblanceolate form in the single example of the Mississippi plant that

had been kept. The southern *Aletris* was therefore left without a name, and might have formed the basis for a new species had it seemed best to found one on a single specimen not much advanced in the floral stage. Sometime after Small's Flora of the Southeastern United States had been published I recalled the *Aletris* and consulted the work to see if such a plant had been described. This I found in the *A. obovata* Nash, whose habitat is similar to that near Starkville: "In pine lands, Jacksonville, Florida." The flowers seem rather more cylindrical than as described in the Florida plant, and appear more like those of *A. farinosa*, but as they are quite young, most of those in the raceme unopened, their full character may not be well developed. In all other respects I see no lack of application in the description, and conclude that *A. obovata* should be looked for in the pine lands of Mississippi.

The names of the other plants collected on the same occasion may be added. All except one, the *Cornus*, which grew by the creek, were associated with the *Aletris*, and are given the same habitat, "Flat pine-barrens, west of Trim-Cane Creek." They are, as named in the botanies of the time: *Gillenia stipulacea* Nutt., *Psoralea eglandulosa* Ell., *Oenothera fruticosa* L., *Cornus stricta* Lam., in low, swampy ground, *Phlox glaberrima* L., *P. aristata* Michx., *Scutellaria integrifolia* L., *Monarda ciliata* L. (now *Blephilia ciliata*), *Pentstemon lævigatus* Soland., *Cirsium virginianum* L.

The *Psoralea* is now placed with *P. pedunculata* (Mill.) Vail. It has no trace of glands, even in bracts and calyx. On the sheet of *P. aristata*, now included with *P. pilosa*, L., are two specimens somewhat different in flowers, one more like the ordinary form of the species, the other with narrower petals and smaller flowers, the lobes of the aristate calyx remarkably long, two or three times the length of the calyx tube, and much curled and twisted when dry. It was doubtless this feature that led to the identification with *C. aristata*. I find that in size of flowers, breadth of segments of corolla, and pubescence or pilosity, plants of *P. pilosa* in this region vary a good deal.

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